



Written Testimony of:

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In support of:

Part WWW of LD 221: An Act to End the Sale of Flavored Tobacco Products

Before the:

Committee on Appropriations and Financial Affairs

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Augusta, ME

The Campaign for Tobacco-Free Kids submits these written comments in support of Part WWW of LD 221 in the proposed budget, which would prohibit the sale of all flavored tobacco products (including e-cigarettes) in Maine. The Campaign for Tobacco-Free Kids is the nation's largest non-profit, non-governmental advocacy organization solely devoted to reducing tobacco use and its deadly toll by advocating for public policies that prevent kids from using tobacco, help smokers quit and protect everyone from secondhand smoke.

This legislation, which would ban the sale of all flavored tobacco products in Maine, would have a dramatic impact on reducing tobacco use among youth, and would help curb the long-term illness, disease and death caused by tobacco addiction across the state. Maine has long been a national leader in its commitment to reducing the death and disease from tobacco use, so it is heartening to see that you continue to take thoughtful, evidenced-based steps to reduce the number of kids who start using tobacco and help tobacco users quit. Even though Maine has made great strides in reducing tobacco use, tobacco use remains the number one preventable cause of premature death and disease in Maine and the nation, killing over 2,400 Mainers every year.¹

Prohibiting the sale of all flavored tobacco products, including menthol cigarettes and flavored cigars and e-cigarettes, is a critical step that will help protect Maine kids from the unrelenting efforts of the tobacco industry to hook them to a deadly addiction. Flavored tobacco products are designed to alter the taste and reduce the harshness of tobacco products so they are more appealing and easy for beginners, who are almost always kids. These products are available in a wide assortment of flavors – like gummy bear, cotton candy, peanut butter cup, cookies 'n cream and pop rocks for e-cigarettes and chocolate, watermelon, lemonade and cherry dynamite for cigars. Tobacco companies are making and marketing deadly and addictive products that look and taste like a new line of flavors from a Ben and Jerry's ice cream store. This growing market of flavored tobacco products is undermining Maine's progress in reducing youth tobacco use.

The youth e-cigarette epidemic creates an immediate crisis that demands urgent action, but equally urgent action is needed to address a public health crisis that has gotten less attention, but over the years has done even greater harm: the marketing and sale of all other flavored tobacco products, especially menthol cigarettes. Banning the sale of all flavored tobacco products is one of the most important things you can do to protect the health of Maine's kids, reverse health disparities in the State, and prevent the 2,400 deaths in Maine each year that are due to tobacco use.

Finally, as Maine continues to combat the novel coronavirus (COVID-19), it has never been more important to take every measure possible to keep our lungs healthy. According to the Centers for Disease Control and Prevention (CDC), **“being a current or former cigarette smoker increases your risk of severe illness from COVID-19.”**² The coronavirus attacks the lungs, and behaviors that weaken the lungs put individuals at greater risk. The harmful impact of smoking on the lungs is well-documented, and there is growing evidence that e-cigarette use (vaping) can also harm lung health. Further, data on COVID-19 patients have revealed that comorbidities such as heart disease, cancer, and diabetes increases the risk for becoming severely ill from the coronavirus.³ Smoking is also a major cause of these underlying conditions. As Maine works to limit the impact of the coronavirus, there has never been a better or more urgent time to enact policies to help people quit smoking and vaping, and prevent young people from ever starting.

In recognition of the health harms caused by flavored tobacco, a growing group of states and communities has taken action to prohibit the sale of flavored tobacco. In November 2019, Massachusetts became the first state to enact a comprehensive ban on the sale of all flavored tobacco products. Massachusetts was soon followed by prohibitions on the sale of flavored e-cigarettes in New Jersey, New York and Rhode Island, and most recently, California enacted a prohibition on the sale of most flavored tobacco products, including menthol cigarettes. These five states are joined by a growing list of over 300 cities and counties across the country, with more states and localities poised to act this year. I urge you to join them. Maine needs to be a leader on this issue and pass this legislation without delay.

Menthol Cigarettes Increase Youth Tobacco Use

While e-cigarette use justifiably gets a lot of attention, no other flavored product contributes more to the death and disease caused by tobacco use than menthol cigarettes. The scientific evidence leaves no doubt that menthol cigarettes increase the number of people, particularly kids who try smoking, become addicted and die a premature death as a result. Banning menthol cigarettes addresses both a critical public health issue and a matter of social justice.

Tobacco companies have long known that menthol cigarettes reduce the harshness of their products and make them easier to use by new users, almost all of whom are under age 18.⁴ Menthol imparts a cooling and soothing sensation, masking the harshness of tobacco and making it easier for beginner smokers and kids to tolerate smoking. The FDA’s Tobacco Products Scientific Advisory Committee (TPSAC) concluded that menthol cigarettes increase the number of children who experiment with cigarettes and the number of children who become regular smokers, increasing overall youth smoking. Further, they found that people

who initiate smoking using menthol cigarettes are more likely to become addicted and become long-term daily smokers.⁵

Flavors hook kids and no flavor hooks more kids than menthol cigarettes. They are the single greatest entryway to cigarette smoking. Just like other flavored tobacco products, youth smokers are more likely to use menthol cigarettes than any other age group:

- Half (50.1%) of youth who have ever tried smoking initiated with menthol flavored cigarettes.⁶
- Half (49.8%) of all current high school smokers use menthol cigarettes.⁷

Menthol Cigarettes Have a Devastating Impact on the Health of African Americans and Are a Major Cause of Tobacco-Related Health Disparities

The continued availability of menthol cigarettes threatens the progress Maine has made in reducing adult smoking, particularly among African Americans. Prevalence of menthol use is highest among African Americans – 85% of all African-American smokers smoke menthol cigarettes, compared to 29% of Whites.⁸ The reason that such a high percentage of African-Americans who smoke use menthol cigarettes is the direct result of a conscious and deliberate decision made decades ago by the tobacco industry to target the African-American community. The net result has contributed to African Americans suffering unfairly and disproportionately from tobacco related diseases. Maine is in a position to reduce tobacco caused disparities in this community by enacting legislation that bans the sale of menthol cigarettes. Opponents of banning menthol cigarettes like to talk about possible unintended consequences, but the undeniable consequences from menthol smoking are higher rates of death and disease, with a disproportionate impact among African Americans.

Both TPSAC's and FDA's own scientific analyses conclude that menthol cigarettes are associated with increased nicotine dependence and reduced success in smoking cessation.⁹ The impact is greatest for African Americans, who predominantly smoke menthol cigarettes. African Americans generally have higher levels of nicotine dependence as a consequence of their preference for mentholated cigarettes.¹⁰ While research shows that African American smokers are highly motivated to quit smoking and are more likely than White smokers to have made a quit attempt and used counseling services in the previous year, they are less likely than White smokers to successfully quit smoking.¹¹ Data from the 2015 National Health Interview Survey show that, among smokers who made a quit attempt in the past year, only 4.9% of African Americans remained abstinent after 6 months, compared to 7.1% of Whites.¹²

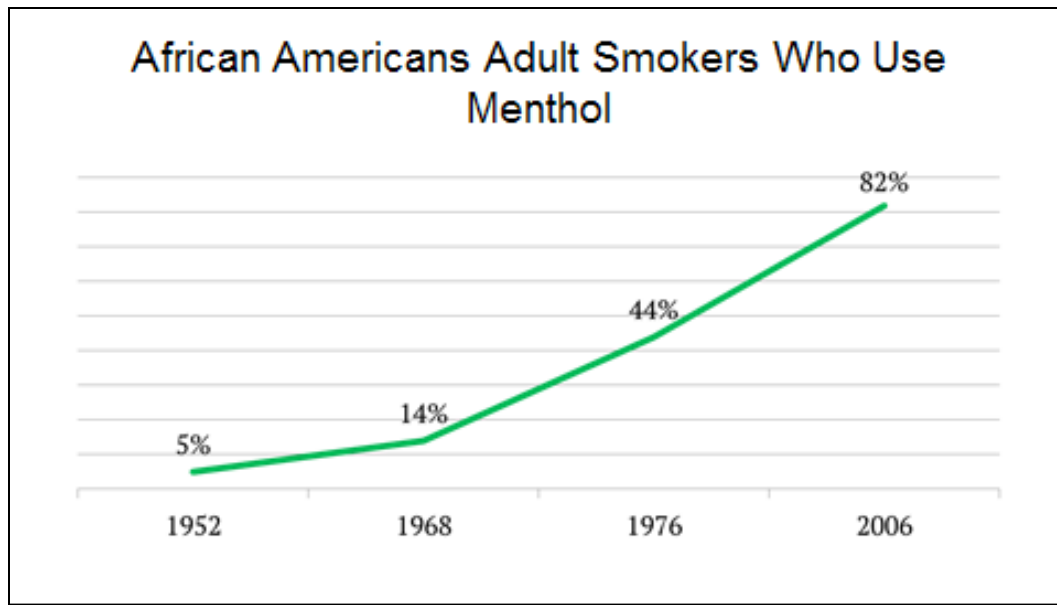
Smoking kills 45,000 African American each year.¹³ Lung cancer is the second most common cancer in both African-American men and women, but it kills more African Americans than any other type of cancer.¹⁴ While the gap has been narrowing, from 2011-2016 the average incidence rate of lung and bronchial cancers was still 15% higher in African-American men compared to white men and the average death rate was 18% higher in African-American men compared to white men.¹⁵ If current smoking rates persist, an estimated 1.6 million black Americans alive today under the age of 18 will become regular smokers, and about 500,000 will die prematurely from a tobacco-related disease.¹⁶ In 2011, TPSAC estimated that by 2020, 4,700 excess deaths in the African American community will be attributable to menthol in cigarettes, and over 460,000 African Americans will have started smoking because of menthol in cigarettes.¹⁷

In addition to the documented disparity in menthol cigarette use among African Americans, new research shows that use of menthol cigarettes is also disproportionately high among Hispanic smokers, lesbian, gay, and bisexual smokers, smokers with mental health problems, socioeconomically disadvantaged populations, and pregnant women.¹⁸

Prohibiting the sale of menthol cigarettes will help to reverse health disparities and accelerate the decline in smoking rates across Maine. Cigarette sales data show that declines in menthol cigarette sales lag behind those of non-menthol cigarettes. From 2009 to 2018, sales of non-menthol cigarettes have declined by 33.1% nationally, while sales of menthol cigarettes have declined by only 8.2%. Of the decline in cigarette sales between 2009 and 2018, 91% is attributable to non-menthol cigarettes.¹⁹ By reducing smoking cessation, menthol has slowed the progress in reducing overall smoking.

The Tobacco Industry Targets African Americans and Youth with Menthol Cigarette Marketing

The tobacco industry wants you to believe that African Americans have always smoked menthol cigarettes, but the use of menthol cigarettes among African Americans seen today is no coincidence and it doesn't reflect an inherent preference for menthol cigarettes by African Americans. This disparity is a direct result of a decades-long marketing campaign by the tobacco industry. Just 5% of African Americans smoked menthol cigarettes in the early 1950's; by 1968 the number had risen to 14%, and today the number is now well over 80%.²⁰ Make no mistake—this is a crisis that is the direct result of the conscious decisions of the major tobacco companies.



Slide Courtesy of Phillip S. Gardiner

http://www.acbhcs.org/tobacco/docs/conference/Dr_Gardiner_Tob_Industry_AA_Me

Decades of research and the tobacco industry's internal documents demonstrate that the industry knowingly employed campaigns and strategies to aggressively target African Americans. Dating back to the 1950s, the tobacco industry has targeted these communities with marketing for menthol cigarettes through sponsorship of community and music events, targeted magazine advertising, youthful imagery, and marketing in the retail environment. Many of these efforts, including the Kool Inner City Music Program and the Newport Van Program, which distributed free samples of menthol cigarettes, targeted African American neighborhoods in cities across the nation.²¹

The tobacco industry has also used popular African American magazines like *Ebony* and *Jet* to advertise menthol cigarettes to African Americans since the 1960s, and this practice continues today. From 1998 to 2002, *Ebony*, a magazine tailored to the African American culture, was 9.8 times more likely than *People* to contain ads for menthol cigarettes.²² An assessment of menthol cigarette ads run from June 2012 to February 2013 found that the tobacco industry spent an estimated \$31 million on menthol cigarette direct mail, email, print and online advertisements in just a 9-month period. During this time, 61 percent of Newport print ads featured at least one African-American model. These ads ran in twenty publications including *Jet*, *Ebony*, and *Essence*, which have predominantly African-American readership.²³



Images courtesy of Stanford Research Into the Impact of Advertising (SRITA) and TrinketsandTrash.Org.

In magazines and other marketing materials, the industry used advertisements characterized by slogans, relevant and specific messages, or images that have a great appeal among those in the black community or depict African Americans in an appealing light.²⁴ In 2004, Brown & Williamson started an ad campaign for their KOOL brand cigarettes clearly aimed at youth—and African-American youth, in particular. The KOOL Mixx campaign featured images of young rappers, disc jockeys and dancers on cigarette packs and in advertising. The campaign also included radio giveaways with cigarette purchases and a Hip-Hop disc jockey competition in major cities around the country. The themes, images, radio giveaways and music involved in the campaign all clearly have tremendous appeal to youth, especially African-American youth. Attorneys General from several states promptly filed motions against Brown & Williamson for violating the Master Settlement Agreement.²⁵

This targeting continues today: magazine advertisements continue to target African Americans and menthol cigarettes continue to be heavily advertised, widely available, and priced cheaper in certain African American communities, making them more appealing, particularly to price-sensitive youth.²⁶ Nationally, Newport cigarettes (the most popular menthol brand among African Americans) are significantly less expensive in neighborhoods with higher proportions of African Americans.²⁷ A wealth of research indicates that African-American neighborhoods have a disproportionate number of tobacco retailers, more price discounts for tobacco products, pervasive tobacco marketing, and in particular, more marketing of menthol products.²⁸

Cigarettes with specific characterizing flavors (except menthol) were prohibited in the U.S. on September 22, 2009, as part of the Family Smoking Prevention and Tobacco Control Act (TCA) that gave the U.S. Food and Drug Administration (FDA) authority over tobacco products.²⁹ However, at that time, FDA did not have jurisdiction over cigars, so the prohibition only applied to cigarettes. Since then, flavored cigars have proliferated and are popular among youth, while manufacturers manipulated their cigarettes to become cigars and avoid the flavor ban. FDA has stated that “Cigars are associated with significant risk and provide no public health benefit.”³⁰

Flavored Cigars Are Now Driving the Growth in Cigar Sales

- Sales of all cigars (i.e., large cigars, cigarillos, and small cigars) more than doubled between 2000 and 2019³¹ and much of the growth is attributable to smaller types of cigars, many of which are flavored and inexpensive (e.g., 3 or 4 cigars for 99 cents).
- In recent years, there has been explosive growth in flavor options for cigars, including many kid-friendly flavors such as “Berry Fusion,” “Maui Pineapple,” “Banana Smash,” and strawberry kiwi. Nielsen market data show that, between 2008 and 2015, sales of flavored cigars grew by nearly 50 percent, increasing flavored cigars’ share of the overall cigar market to 52.1 percent.³²

Cigar Use Remains Popular among Youth Due to Continued Availability of Flavors

- Nationally, youth cigar use has not declined as quickly as cigarette smoking. Today, cigars are the second most popular tobacco product among youth after e-cigarettes, with more youth smoking cigars (5%) compared to cigarettes (4.6%). Black high school students smoke cigars at more than three times the rate of cigarettes (9.2% for cigars and 2.8% for cigarettes) and at higher rates compared to other races or ethnicities (4.2% for white, non-Hispanic or 5.6% for Hispanic high school students).³³
- According to the 2019 National Youth Tobacco Survey, 43.2% of current youth high school cigar smokers report using a flavored product in the last month.³⁴ The 2016-2017 wave of the PATH study found that 56.8% of 12-17 year olds who had ever smoked cigarillos started with a flavored product.³⁵ In 2013-2014, 73.8% of youth cigar smokers reported that they smoked cigars “because they come in flavors I like.”³⁶
- A 2017 study analyzed the impact of the 2009 ban on characterizing flavors in cigarettes on youth tobacco use and found that cigarette use declined significantly after the ban, whereas cigar and pipe tobacco use significantly increased. Further, use of menthol cigarettes, the only remaining flavored cigarette, increased significantly after the ban.³⁷

Manufacturers Manipulated Their Products to Circumvent FDA’s Flavored Cigarette Ban

The loopholes in the TCA led to cigarette makers manipulating their products to qualify as “filtered” cigars so they could still sell flavored products.³⁸ For instance, the 2012 Surgeon General’s report, *Preventing Tobacco Use Among Youth and Young Adults*, noted that flavored cigarettes such as Sweet Dreams re-emerged as Sweet Dreams flavored cigars after the federal restriction on flavored cigarettes went into effect.³⁹ Company documents provided to U.S. Representative Henry Waxman after a formal inquiry showed that Kretek International intentionally changed their cigarettes to cigars to exploit the loophole in the TCA and avoid the flavor ban.⁴⁰ In December 2016, the FDA issued warning letters to four tobacco manufacturers – Swisher International, Inc., Cheyenne International LLC, Prime Time International Co. and Southern Cross Tobacco Company Inc. – for marketing and selling fruit-flavored cigarettes labeled as cigars, in violation of the TCA.⁴¹

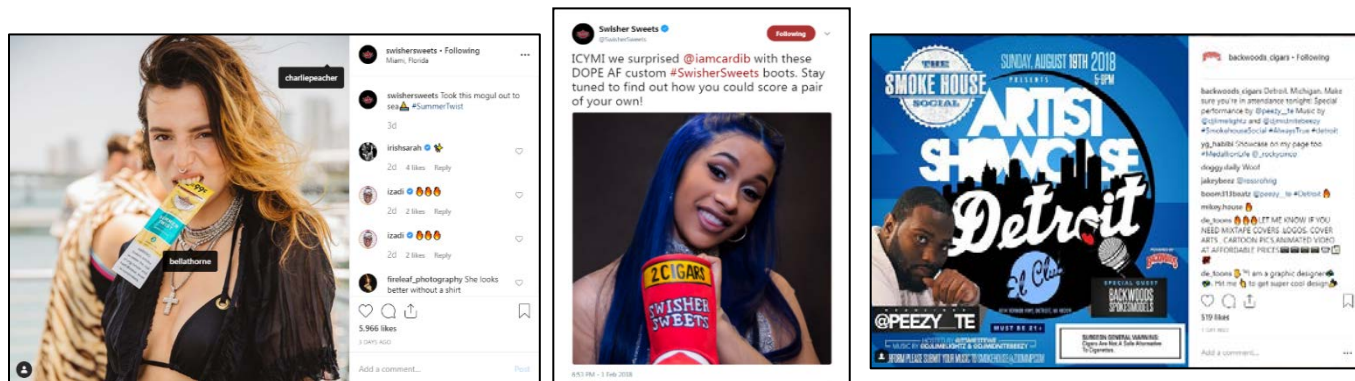
Flavored Cigars Remain Popular Among Youth, Especially African Americans

In recent years, cigars have surpassed cigarettes in popularity among young people, and they are disproportionately used by Black youth. Today, 5% of U.S. high school students smoke cigars (vs. 4.6% for cigarettes). Rates are higher among boys (5.4%) and among Blacks (9.2%).⁴²

A primary reason for the popularity of cigars among youth is the wide array of available flavors. In fact, 73.8% of youth cigar smokers smoked cigars “because they come in flavors I like.”⁴³ Flavored cigars have proliferated in recent years and now make up more than half the U.S. cigar market.⁴⁴ Sales of cigars (i.e., large cigars, cigarillos, and small cigars) have more than doubled between 2000 and 2019, and much of the growth is attributable to smaller types of cigars, many of which are flavored and inexpensive (e.g., 3 or 4 cigars for 99 cents).⁴⁵ There are over 250 cigar flavors, including of “Banana Smash,” Brownie, and Strawberry Kiwi.⁴⁶ Cheap, sweet cigars can serve as an entry product for kids to a lifetime of smoking.



Similar to e-cigarettes, cigars are marketed using social media, hip hop and rap music event sponsorship, celebrity endorsements and point-of-sale promotions.⁴⁷



FDA has concluded that “all cigars pose serious negative health risks” and that “all cigar use is harmful and potentially addictive.”⁴⁸ According to the National Cancer Institute, smoking cigars causes serious health consequences, including cancer of the oral cavity, larynx, esophagus and lung, and cigar smokers are also at increased risk for aortic aneurysms.⁴⁹ Each year, about 9,000 Americans die prematurely from regular cigar use.⁵⁰ Cigar smoke is composed of the same toxic and carcinogenic constituents found in cigarette smoke.⁵¹

In addition, there is mounting evidence that youth use of cigars is associated with subsequent uptake of cigarette smoking. According to an analysis of data from the FDA’s PATH study, decreasing the cigar use among youth could prevent up to 4.6% of youth cigarette initiation overall and 9.1% among Black youth specifically.⁵²

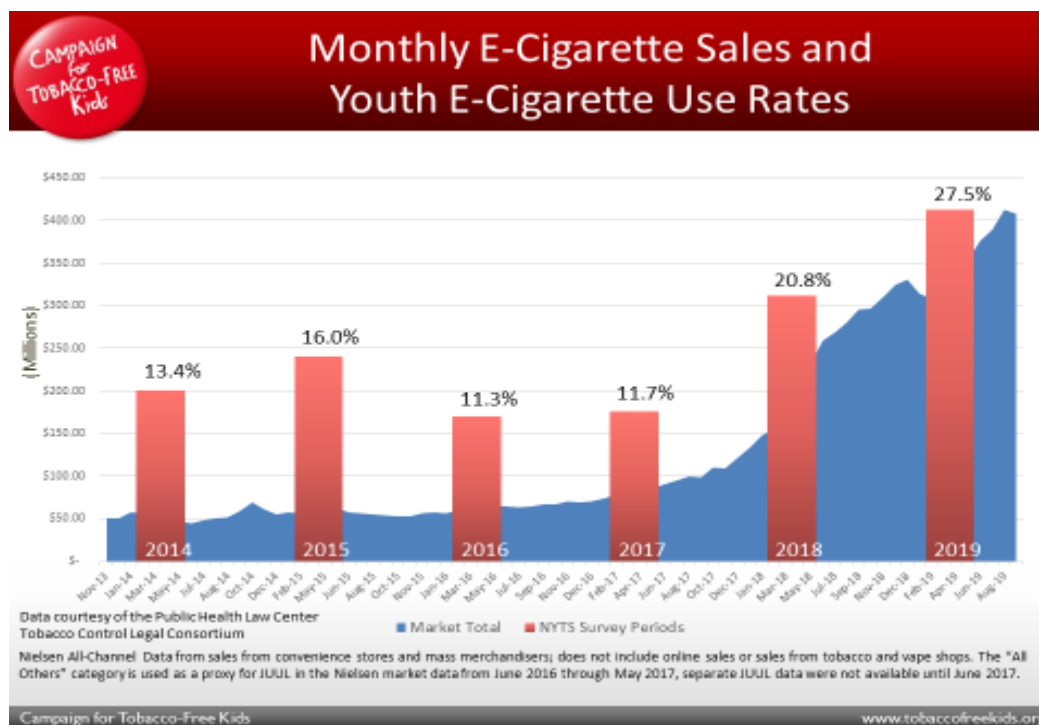
E-cigarette Use by Youth is Skyrocketing

We are at a critical juncture in our nation’s public health history. After making tremendous progress in reducing youth tobacco use over the past several decades, e-cigarettes, and Juul in particular, are undermining the declines in overall youth tobacco use. Youth e-cigarette use in the United States has skyrocketed to what the U.S. Surgeon General and the FDA have called “epidemic” levels.⁵³ It is a public health crisis and *it is getting worse*.

The escalation of youth e-cigarette use is truly unprecedented. Researchers at the University of Michigan who conduct the Monitoring the Future Study found that the increase in youth vaping of nicotine from 2017 to 2018 was the single largest one year increase in youth use of *any substance* in the survey’s 43-year history.⁵⁴ Data released in the *New England Journal of Medicine* in September 2019 (and followed up with a more complete release in December

2019), show that this historic increase was followed by another increase in 2019. From 2017 to 2019, youth nicotine vaping more than doubled among 8th, 10th and 12th graders. Now, 9% of eighth graders, 20% of 10th graders and 25% of 12th graders are current vapers.⁵⁵

Newly released data from the 2019 National Youth Tobacco Survey (NYTS) also showed that e-cigarette use among high school students more than doubled from 2017 to 2019, from 11.7 percent to 27.5 percent of students, or more than one in four high schoolers. Youth are starting to use e-cigarettes at younger and younger ages. Among middle school students, e-cigarette use more than tripled from 2017 to 2019, increasing from 3.3% to 10.5%. Altogether, over 5.3 million middle and high school students used e-cigarettes in 2019 – an increase of over three million users in just two years.⁵⁶



Nationally, the rise in e-cigarette use has driven an increase in the use of any tobacco product among youth. In 2019, 31.2% of high school students and 12.5% of middle school students – 6.2 million kids altogether – were current (past-month) users of some type of tobacco product in 2019. This is the highest tobacco use rate reported by the NYTS in 19 years.⁵⁷ There is no doubt that e-cigarettes are reversing decades of progress that Maine has made in reducing youth tobacco use and are addicting a new generation of kids.

E-Cigarettes Have Not Been Proven to Help Smokers Quit

No major scientific body in the United States has concluded that e-cigarettes are an effective tobacco cessation device. Leading public health authorities in the U.S. have found that there is not enough evidence to recommend e-cigarettes for tobacco cessation, and no e-cigarette has received approval from the FDA to be sold as a tobacco cessation product. The 2020 Surgeon General Report on Smoking Cessation, released just this week, concluded that “there is presently inadequate evidence to conclude that e-cigarettes, in general, increase smoking cessation.” The Surgeon General also cautions that because e-cigarettes are not a single product, but “a continually changing and heterogeneous group of products” that “are used in a variety of ways,” it is difficult to make broad generalizations about the efficacy of e-cigarettes for smoking cessation based upon any one study or any one product.⁵⁸

Moreover, there is no evidence that flavors in e-cigarettes play any role in smoking cessation. While there are surveys showing that many adults enjoy using flavored products, and anecdotal reports of smokers who says flavored e-cigarettes helped them quit, there is no evidence that smokers could not quit without non-tobacco flavors. There has not been a single randomized controlled trial to assess the impact of flavored vs. non-flavored or tobacco-flavored e-cigarettes on smoking cessation outcomes.

Conclusions from Public Health Authorities:

- The U.S. Preventive Services Task Force, which makes recommendations about the effectiveness of specific preventive care services after a thorough assessment of the science, concluded that “the current evidence is insufficient to recommend electronic nicotine delivery systems for tobacco cessation....”⁵⁹
- A 2018 report from the National Academies of Sciences, Engineering, and Medicine (NASEM) concluded, “[o]verall, there is limited evidence that e-cigarettes may be effective aids to promote smoking cessation.”⁶⁰
- Researchers from the CDC stated, “There is currently no conclusive scientific evidence that e-cigarettes promote long-term cessation, and e-cigarettes are not included as a recommended smoking cessation method by the U.S. Public Health Service.”⁶¹
- FDA is the federal agency charged with determining what products are effective at helping smokers quit. FDA reached the same conclusion and stated, “[T]here is not sufficient evidence to conclude that youth and young adults are using [e-cigarettes] as a means to quit smoking.”⁶² According to the FDA, “systematic reviews found insufficient evidence to conclude that e-cigarettes aid smoking cessation.”⁶³ In reaching this conclusion, the FDA recognized that several studies have found that cigarette smokers who also used e-cigarettes had statistically significantly worse quit rates than those

cigarette smokers who did not use e-cigarettes.⁶⁴ In a recent court brief, the FDA stated that, “the claim that vaping helps smokers quit in meaningful numbers remains unproven.”⁶⁵

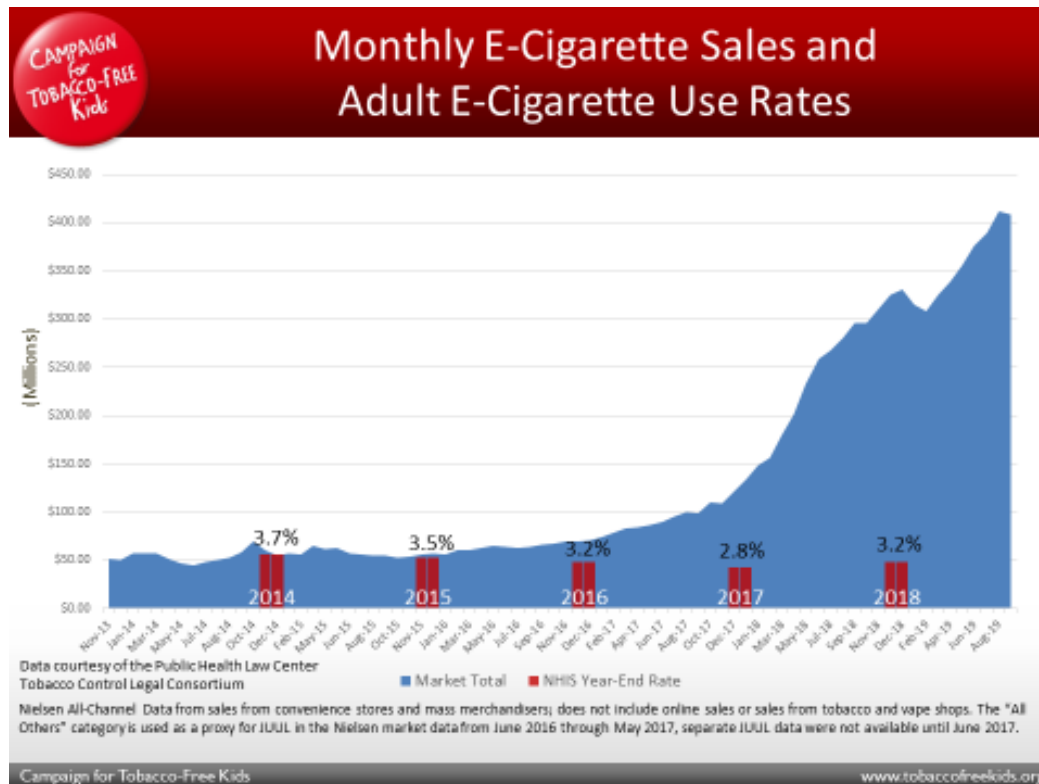
- In *Nicopure v. FDA*, the court noted that “[E-cigarettes] provide a trendy on-ramp to tobacco use for people who otherwise might have never used it. Accordingly, while e-cigarettes have been touted as less risky than combustible cigarettes, those claims remain unproved. Meanwhile, e-cigarettes clearly have the potential to increase tobacco use and net health costs for the public as a whole.”⁶⁶

Additionally, several studies have found that e-cigarette use is not associated with successful quitting.⁶⁷ A 2018 study did not find any evidence that ENDS help adult smokers quit at a higher rate than smokers who did not use these products despite ENDS users being more likely to make a quit attempt. In fact, the authors state that “findings indicate that, at the time of this study, ENDS under “real world” use and conditions may have suppressed or delayed quitting among some adult smokers.” Specifically, of the 27 percent of smokers who reported using ENDS at baseline, about 90 percent were still smoking at one-year follow-up. Moreover, the study found that ENDS users quit at a lower rate than non-ENDS users regardless of frequency or duration of ENDS use, device type, quitting as reason for use, or e-liquid flavor.⁶⁸ A meta-analysis of 38 studies that examined the association between e-cigarette use and smoking cessation among adult smokers found that the odds of quitting were less among smokers using e-cigarettes.⁶⁹ A systematic review that examined consumer preference for various e-cigarette attributes found “inconclusive evidence” as to whether flavored e-cigarettes assisted quitting smoking.”⁷⁰

E-cigarette companies may claim that adult smokers are their target audience, but that is not who is using the product. E-cigarettes have become increasingly popular among youth and young adults, while there has been no significant uptake among older adults. In 2018, 3.2% of adults used e-cigarettes, compared to 2.8% in 2017, 3.2% in 2016 and 3.5% in 2015 – adult e-cigarette use has remained essentially flat at about 3% over the past several years.⁷¹ When it comes to adults, rather than quitting, data show that the more common use pattern for adult e-cigarette users is to use both e-cigarettes and cigarettes.⁷² The currently available data show that about half (49.6%) of adult e-cigarette users are also current cigarette smokers (dual users).⁷³

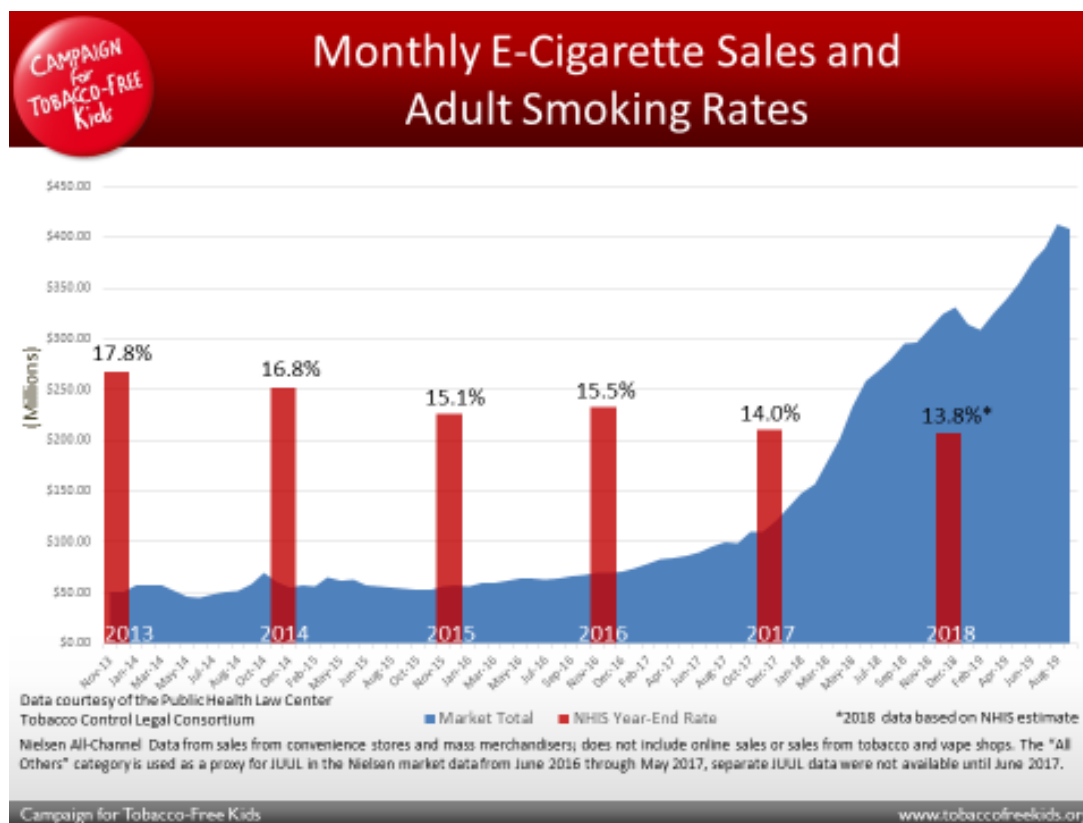
The preceding slide shows that while overall sales of e-cigarettes were skyrocketing, the youth use rates were skyrocketing in almost identical ways. By comparison (as shown in the two following charts), the adult e-cigarette use rates and adult smoking rates did not vary over the same period of time.

If adults were using e-cigarettes to quit on a population level, then the adult use rates would have increased (and adult smoking rates would have decreased at a larger amount) to correspond with the huge increase in e-cigarette sales. That did not happen. The only data that changed significantly in tandem with the increased sales of e-cigarettes was that of youth use of the products. The data clearly show that the growth of e-cigarettes sales from 2012 to present was on the backs of youth.



Little data are available to show what happens with dual users over time. Analysis of FDA’s Population Assessment of Tobacco and Health (PATH) data found that nearly 9 out of 10 early dual users were still smoking cigarettes at follow-up. Among adults who were dual users of e-cigarettes and cigarettes at Wave 1 (2013-2014), 44.3 percent maintained dual use, 43.5 percent discontinued e-cigarette use but maintained cigarette smoking, and only 12.1 percent discontinued cigarette use (5.1% discontinued cigarette use but continued e-cigarette use and 7.0% discontinued use of both products) at Wave 2 (2014-2015).⁷⁴ CDC has highlighted the importance of quitting cigarettes completely, not just cutting down. According to the CDC, “If you only cut down the number of cigarettes you smoke by adding another tobacco product, like e-cigarettes, you still face serious health risks. Smokers must quit smoking completely to fully protect their health – even a few cigarettes a day are dangerous.”⁷⁵ A study using 2013-2014

PATH data found that dual users had toxicant exposures that were similar to those who only used cigarettes.⁷⁶



The Claim that E-Cigarettes are 95% Safer than Cigarettes is Erroneous and is Widely Disputed by Researchers

Claims that e-cigarettes are 95% safer than cigarettes, popularized by an estimate in a 2015 Public Health England (PHE) report are unfounded. Significantly, not a single U.S. health authority or government agency has supported this claim. In fact, the claim is widely disputed by U.S. government agencies and medical associations.

- The FDA has noted that the panelists conducting the underlying harm analysis “were selected without any formal criterion,” that there was a “lack of hard evidence” supporting most of the harm analysis, and that the methodology for arriving at the relative harm assessments underlying the “95% safer” conclusion was “unclear.”⁷⁷
- A recent article concluded, “The “95% safer” estimate is a “factoid”: unreliable information repeated so often that it becomes accepted as fact.” This article also notes “the evidence-lacking estimate derived in 2013 cannot be valid today and should not be relied upon further.” Since 2013, a substantial amount of new evidence has emerged about e-cigarettes. The article notes that the devices are now more powerful, create

more aerosol, and expose users to more toxicants. The proliferation of e-liquids with nicotine salts allow users to inhale significantly higher levels of nicotine. More research emerged about the toxicants in e-cigarettes, and their potential respiratory and cardiovascular effects.⁷⁸

- An editorial in *The Lancet* concluded that, “the opinions of a small group of individuals with no pre-specified expertise in tobacco control were based on an almost total absence of evidence of harm. It is on this extraordinarily flimsy foundation that PHE based the major conclusion and message of its report.”⁷⁹

Studies continue to raise new concerns about e-cigarettes and the evidence is insufficient to reach definitive conclusions regarding their relative health risk compared to cigarettes. The 2018 NASEM Report found that a great deal of scientific uncertainty still exists regarding the relative safety of e-cigarettes and that, “the absolute risks of the products [e-cigarettes] cannot be unambiguously determined at this time. Long-term health effects, of particular concern for youth who become dependent on them, are not yet clear.”⁸⁰

Flavored E-Cigarettes Have Fueled the Popularity of These Products Among Kids

The evidence is clear that flavored e-cigarettes, like mint, mango and gummy bear, have fueled this epidemic. In recent years, there has been an explosion of sweet-flavored e-cigarettes. As of 2017, there were more than 15,500 unique e-cigarette flavors available online, including many kid-friendly flavors like gummy bear, cotton candy, and peanut butter cup.⁸¹ In January 2020,

the FDA restricted some flavors in cartridge-based e-cigarettes, but exempted menthol-flavored e-cigarettes and left flavored e-liquids and disposable e-cigarettes widely available in every imaginable flavor. As a result, the market share of these products has grown substantially:

- The market share of disposable e-cigarettes more than doubled between January 26 and November 29, 2020, from 15.2% to 33.9%.⁸²
- As of November 29, 2020, menthol-flavored products accounted for 42.5% of total e-cigarette sales. Sales of menthol flavored e-cigarettes increased by 55.9% between January 26 and November 29, 2020, from 5.3 million units to 8.3 million units.⁸³

Research shows that flavored products are not only popular among youth, but play a role in initiation and uptake of tobacco products. As the recent Surgeon General Report on Smoking Cessation succinctly stated, “the role of flavors in promoting initiation of tobacco product use among youth is well established.”⁸⁴ The 2016 Surgeon General Report on e-cigarettes concluded that flavors are among the most commonly cited reasons for using e-cigarettes among youth and young adults.⁸⁵

- The 2020 NYTS found that an increasing proportion of youth e-cigarette users reported using flavored products in 2020 (82.9%, up from 68.8% in 2019).⁸⁶ Nearly 3 million youth use flavored e-cigarettes.⁸⁷ Among high school students who currently used any type of flavored e-cigarette, the most commonly used flavor types were fruit (73.1%), mint (55.8%), menthol (37%), and candy, desserts, or other sweets (36.4%).⁸⁸
- While fruit and mint flavors are now prohibited in cartridge-based e-cigarettes, disposable e-cigarettes come in a wide array of kid-friendly flavors, like cotton candy, strawberry, and mint, which have become increasingly popular among kids. Among high school current e-cigarette users, use of disposable e-cigarettes increased by 1,000% from 2019 to 2020 (from 2.4% to 26.5%).⁸⁹ Among current youth users of disposable e-cigarettes, the most commonly used flavor type is fruit (82.7%), followed by mint (51.9%).⁹⁰
- Data from the 2016-2017 wave of the government’s Population Assessment for Tobacco and Health (PATH) study found that 70.3% of current youth e-cigarette users say they use e-cigarettes “because they come in flavors I like.”⁹¹

If anything, these official government figures under report the percentage of youth who use flavored e-cigarettes. Prior to schools being closed due to COVID-19, if you spoke with any teacher, school principal or high school student, they would tell you that virtually every kid who uses an e-cigarette, uses a flavored e-cigarette. It is the reason that banning flavored e-cigarettes is an essential step in reversing the youth e-cigarette epidemic. Anything less will fail.



As with menthol cigarettes, e-cigarettes didn’t become popular with kids by accident. E-cigarette makers have introduced products with thousands of flavors that appeal to young people and engaged in the kind of marketing that mirrors what the cigarette industry did for decades. The 2016 Surgeon General Report on e-cigarettes concluded that, **“E-cigarettes are marketed by promoting flavors and using a wide variety of media channels and approaches**

that have been used in the past for marketing conventional tobacco products to youth and young adults.”⁹²

The use of flavors in e-cigarette products is of even greater concern because e-cigarettes are the subject of extensive advertising campaigns, and there is evidence that young people are exposed to significant amounts of e-cigarette advertising. By mimicking the tobacco industry’s strategies, including celebrity endorsements, slick TV and magazine advertisements, and sports and music sponsorships, e-cigarette advertising has effectively reached youth and young adults. The 2019 NYTS found that 7 out of 10 middle and high school students—18.3 million youth—report being exposed to e-cigarette advertisements.⁹³

When Juul was first launched in 2015, the company used colorful, eye-catching designs and youth-oriented imagery and themes, such as young people dancing and using Juul. Juul’s original marketing campaign included billboards, YouTube videos, advertising in Vice Magazine, launch parties and a sampling tour. A report by Stanford University researchers concluded that Juul’s launch marketing was “patently youth oriented” and closely resembled the themes and tactics used by the tobacco industry for decades.⁹⁴ Posts on social media platforms like Twitter and Instagram also fueled Juul’s popularity among youth.⁹⁵ Social media promotion included influencers – social media stars with large numbers of online followers who were paid to recommend Juul and post photos with the product. These influencers created tremendous interest and enthusiasm for the product.

Countless e-cigarette brands have subsequently followed Juul’s playbook to target kids with marketing for similar pod-based products like Reynolds’ Vuse,⁹⁶ as well as newer disposable e-cigarettes like Puff Bar and open systems like Smok and Suorin. E-cigarette companies market extensively on product websites and maintain a strong presence on social media sites popular among youth, like Facebook, YouTube, Instagram, and Twitter.⁹⁷ E-cigarette manufacturers have also placed ads on search engines and websites that focus on music, entertainment, and sports and which often have substantial youth and young adult audiences.⁹⁸

Juul claims that it has “voluntarily” stopped marketing on social media, but Juul made that announcement only after it faced severe public criticism. There is nothing to prevent Juul from reversing its public position about where and how it will market its products as soon as public scrutiny fades. Indeed, in other countries Juul has engaged in the type of marketing and advertising that fueled the US youth e-cigarette epidemic so that its decision in the US should be seen as nothing more than a temporary effort to deflect public scrutiny and certainly not a corporate commitment to stop marketing to kids. Government action is the only way to protect our kids.

Youth E-cigarette Users Struggle with Nicotine Addiction

The number of youth now using e-cigarettes is alarming and the evidence is growing that e-cigarettes increases the susceptibility to long term addiction. The data are clear that youth who are using e-cigarettes are not just experimenting, but are becoming addicted at levels that have not been seen among kids who use cigarettes in decades.

- The proportion of youth who use e-cigarettes frequently is growing. In 2020, 38.9% of high school users (up from 34.2% in 2019) and 20% of middle school users (up from 18% in 2019) were frequent users of e-cigarettes, reporting use on at least 20 of the preceding 30 days.⁹⁹
- Alarming, 22.5% of high school users and 9.4% of middle school users reported daily use, a strong indication of addiction.¹⁰⁰
- This amounts to 1.3 million middle and high school students who were frequent users of e-cigarettes, including over 730,000 daily users.¹⁰¹

Similarly, data from Maine's 2019 Youth Risk Behavior Survey (YRBS) reflect similar levels in frequent use of e-cigarettes. In 2019, frequent use (20+ days/month) of e-cigarettes among Maine high school students was 9.4% overall, or 31.1% of users. More strikingly, this represents a 400% increase over the amount of frequent use in 2017 (2.3%)¹⁰²

Though there is insufficient research on the long-term effects of using e-cigarettes in general, there is a growing body of evidence of immediate harms, many of which are caused by the intense addiction caused by the high levels of nicotine these products deliver. Nicotine is a highly addictive drug and young people are especially vulnerable to nicotine addiction. Nicotine can have lasting damaging effects on adolescent brain development, because brain development continues until about age 25. According to the Surgeon General, "because the adolescent brain is still developing, nicotine use during this critical period can disrupt the formation of brain circuits that control attention, learning, and susceptibility to addiction."¹⁰³ Because of these risks, the Surgeon General found that, "The use of products containing nicotine in any form among youth, including in e-cigarettes, is unsafe."¹⁰⁴

The observable immediate harms from e-cigarette use have increased since the introduction of Juul and Juul like products. Since the introduction of Juul, youth are now using products that effectively deliver very large doses of nicotine. Juul pioneered a new e-liquid formulation that delivers nicotine more effectively and with less irritation than earlier e-cigarette models. According to the company, the nicotine in Juul is made from "nicotine salts found in leaf tobacco, rather than free-base nicotine," in order to "accommodate cigarette-like strength

nicotine levels.”¹⁰⁵ A 2018 Surgeon General advisory on e-cigarette use among youth warned that nicotine salts allow users to inhale high levels of nicotine more easily and with less irritation than e-cigarettes that use free-base nicotine. As a result, it is easier for young people to initiate the use of nicotine with these products.¹⁰⁶ A single Juul pod can deliver as much nicotine as a pack of cigarettes.¹⁰⁷ One study estimated that youth could meet the threshold for nicotine addiction by consuming just one quarter of a Juul pod per day.¹⁰⁸ And yet, research has also found that many young Juul users often do not know the products they are using contains nicotine.¹⁰⁹

Juul’s competitors, seeking to emulate the company’s success, have since flooded the U.S. market with similar pod-based e-cigarettes, including some that have nicotine levels even higher than Juul’s, resulting in what some researchers have referred to as a “nicotine arms race.”¹¹⁰ Many of these companies offer devices and pods that are cheaper than Juul and in a wider variety of kid-friendly flavors.¹¹¹ NYTS data show that Juul was overwhelmingly the most popular e-cigarette among youth (preferred by 59% of high school e-cigarette users), but other products like Suorin and Smok, are becoming popular as well.¹¹² As noted previously, disposable e-cigarettes have increased in popularity among youth, due to their exemption from federal policy on flavored e-cigarettes. Disposable e-cigarettes are sleek, easily concealed, pre-charged, cheap (some for less than \$5), available in a wide variety of flavors, and can even have higher nicotine concentrations than Juul.¹¹³ Disposables come in an array of kid-friendly flavors, including cotton candy, iced apple mango, strawberry, and mint. These products are packed with nicotine, with some reaching up to 7.0% nicotine (a higher nicotine concentration than Juul).¹¹⁴ Companies market these products as accessible and easy to use. Ready to use right out of the box, manufacturers tout the instant flavor hit and encourage users to try a variety of flavors.

These statistics are confirmed by parents and pediatricians across the country. E-cigarette use, has permeated the daily life of hundreds of thousands of youth. It is clear that large numbers of teen e-cigarette users are struggling with nicotine addiction and withdrawal. The problem is so bad that FDA convened a public hearing to gather input on how to help youth addicted to the nicotine in e-cigarettes. No one is quite sure how to help these youth quit. Banning flavored e-cigarettes will prevent these kids from ever getting hooked.

Youth E-Cigarette Users Are At Increased Risk of Smoking Cigarettes

E-cigarettes are addicting a new generation of kids and threaten to reverse decades of progress in reducing youth tobacco use. Alarming, evidence also continues to build that e-cigarette use in young people increases the likelihood of smoking cigarettes.

- In 2016, the Surgeon General concluded that while more research is needed, evidence from several longitudinal studies suggests that e-cigarette use is “strongly associated” with the use of other tobacco products among youth and young adults, including conventional cigarettes.¹¹⁵
- In 2018, the National Academies of Science, Engineering & Medicine (NASEM) released a comprehensive report finding substantial evidence that e-cigarette use increases risk of ever using cigarettes among youth and young adults. The NASEM report also concluded, “There is moderate evidence that e-cigarette use increases the frequency of subsequent combustible tobacco cigarette use” among youth and young adults.¹¹⁶
- An analysis of PATH data found that from 2013 to 2016, youth (ages 12-15) e-cigarette use was associated with more than four times the odds of trying cigarettes and nearly three times the odds of current cigarette use. The researchers estimate that this translates to over 43,000 current youth cigarette smokers who might not have become smokers without e-cigarettes.¹¹⁷

Multiple studies have also demonstrated that many youth who use e-cigarettes are kids who are among those least at risk of cigarette smoking. For these kids, e-cigarettes are not replacing cigarettes, they are turning non-tobacco users into tobacco users.¹¹⁸

FDA Has Failed To Use Its Regulatory Authority Over E-Cigarettes to Protect Kids

Although Congress gave FDA broad regulatory authority over tobacco products in the Family Smoking Prevention and Tobacco Control Act of 2009 (Tobacco Control Act), the agency has largely failed to use that authority to regulate e-cigarettes.¹¹⁹ Delayed regulation by the FDA necessitates state action to protect Maine’s youth.

Despite the requirement in the Tobacco Control Act that new tobacco products (i.e. those introduced after February 15, 2007) obtain an FDA order authorizing their marketing,¹²⁰ not a single e-cigarette product currently on the market has been reviewed and authorized by the FDA. Thus, it is essential for Maine and other states to utilize their authority to protect the health of its residents and especially its youth.

FDA’s enforcement policy announced on January 2, 2020 is wholly inadequate to address the youth vaping epidemic. While the policy restricts some flavors in pod-based e-cigarettes, it leaves thousands of kid-friendly e-cigarettes on the market, including:

- Disposable e-cigarettes like Puff Bar and Mojo that are cheap, sold in a wide assortment of kid-friendly flavors like banana ice and pink lemonade, and can deliver massive doses of nicotine.
- Nicotine e-liquids sold in over 15,000 flavors.
- Sleek, refillable e-cigarette devices like Smok and Suorin.
- Menthol varieties of Juul and other cartridge/pod-based e-cigarettes.



Data released this past fall show that the FDA missed the opportunity to make far greater progress in reducing youth e-cigarette use as kids quickly migrated to the flavored products that were exempt from the policy:

- In 2020, 80% of 10th and 12th grade e-cigarette users reported that they could still easily obtain nicotine solutions in flavors other than tobacco or menthol.¹²¹
- From 2019 to 2020, use of disposable e-cigarettes increased by 1,000% (from 2.4% to 26.5%) among high school e-cigarette users and by 400% (from 3.0% to 15.2%) among middle school e-cigarette users.¹²²
- In 2020, 37% of youth e-cigarette users, including 44.5% of users of refillable cartridge systems like Juul, reported using menthol-flavored products.¹²³
- As of November 29, 2020, menthol-flavored products accounted for 42.5% of total e-cigarette sales. Sales of menthol-flavored e-cigarettes increased by 55.9% between January 26, 2020 and November 29, 2020, from 5.3 million units to 8.3 million units. Sales of menthol-flavored cartridge-based products like Juul increased by 60% over this same time.¹²⁴

Only the elimination of all flavored e-cigarettes can end the worsening youth e-cigarette epidemic and stop e-cigarette companies from luring and addicting kids with flavored products. LD 1550 will protect Maine's kids by eliminating the gaping loopholes in the FDA's policy.

Conclusion

We are in the middle of an epidemic in youth e-cigarette use. Parents, school officials, and health care providers from across the country have recognized that a new generation of young people are becoming addicted to nicotine with potentially devastating long term consequences. In addition, largely because of the marketing of flavored cigars and menthol cigarettes, higher rates of smoking and other forms of tobacco use persist among populations the tobacco industry has targeted, especially African Americans, burdening these communities with higher rates of cancer, heart disease, and pulmonary disease attributable to tobacco use. These challenges will not go away absent strong, clear and decisive government action.

The scientific evidence leaves no doubt that flavored tobacco products, including flavored e-cigarettes and menthol cigarettes, increase the number of people, particularly kids, who initiate tobacco use and become addicted. Prohibiting the sale of menthol cigarettes and other flavored tobacco products is an essential step toward protecting our children and our community from the tobacco industry's aggressive efforts to hook children to these dangerous, addictive products. This issue is quite simple—it is about common sense and protecting our kids and populations that the tobacco industry has targeted and continues to target.

Eliminating health disparities and many of the factors that disproportionately impact many of our citizens can be complicated and difficult to solve. But we have the tools and ability to dramatically reduce the health disparities caused by tobacco use in our state. We urge you to include Part WWW of LD 221 in the budget and enact it into law without any weakening amendments as quickly as possible.

Thank you for the opportunity to testify on this important issue.

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